

# REYNARD PROPOSERS SORTED BY ORGANIZATION

Thayne Coffman

21st Century Technologies

tcoffman@21technologies.com

Virtual World research interest:

social and behavioral links between virtual and real life actions; social network analysis; communication analysis (both structural and semantic); behavioral pattern classification; spatial motion pattern analysis

Karyn Apfeldorf

Arete

kapfeldorf@arete.com

Chris Argenta

Applied Research Associates, Inc.

cargenta@ara.com

Virtual World research interest:

ARA is a large company with expertise and experience in a wide range of relevant technical areas. We design, develop and integrate defense systems that support target characterization; information exploitation; behavior modeling and analysis; multi-INT data

Christopher Rickman

**Arete Associates** 

crickman@arete.com

**Virtual World research interest:** 

Organizational networking infrastructure, collaboration, intelligence visualization, algorithm development and technical integration.

Katie Engel

Aptima, Inc.

kengel@aptima.com

Bryan Loyall

**BAE Systems Advanced Information Technologies** 

bryan.loyall@baesystems.com

Matthew Puglisi

Aptima, Inc.

mpuglisi@aptima.com

Dana Moore

**BBN Technologies** 

dana.moore@bbn.com

Virtual World research interest:

Aptima is interested in researching and developing human performance measures in virtual worlds. This will allow the Intelligence Community to fully leverage the potential of virtual worlds as training tools.

**Virtual World research interest:** 

3D structure from 2D video intercept. Mirror Worlds. Analytical conavigation

W Eugene Proctor

**Architecture Technology Corp** 

gproctor@atcorp-dc.com

Virtual World research interest:

distributed network protocols information assurance digital forensics

Matt Sarro

bridgeborn, Inc.

msarro@bridgeborn.com

Penelope Semrau John Burwell **California State University, Los Angeles Forterra Systems** psemrau@exchange.calstatela.edu jburwell@forterrainc.com Virtual World research interest: **Virtual World research interest:** Examination of cultural differences (shared values, Forterra develops a virtual world platform suitable for supporting attitudes, and beliefs) and diverse roles in cultural groups. commercial and national security applications. Examination of differences in gender roles. I have been teaching in world for past 2 years. Jaime Carbonell Mark Riedl **Carnegie Mellon University Georgia Institute of Technology** e.fink@cs.cmu.edu riedl@cc.gatech.edu Virtual World research interest: Virtual World research interest: Natural language processing, autonomous agents, learning, Models of human cognition, storytelling, and social and cultural norms reasoning under uncertainty, automated data gathering, massive data analysis Sean Guarino Lora Weiss **Charles River Analytics Inc. Georgia Tech** sguarino@cra.com Lora.Weiss@gtri.gatech.edu Virtual World research interest: Virtual World research interest: behavior analysis, behavior modeling, internet psychology, Game Engines For Complex, Dynamic Systems computer mediated communications, immersive training, Research Highlights: applied artificial intelligence, social network analysis, virtual - Enable Network Evaluation in Evolving Environments therapy Rapidly Populate Scenarios w/ Dynamic and Disparate Entities - Multiple Players Part of Single Game (MMP) - Avitars - Provide Modul **Doug Lenat** Elizabeth Whitaker Cycorp **Georgia Tech Research Institute** betty.whitaker@gtri.gatech.edu lenat@cyc.com Virtual World research interest: Virtual World research interest: (1) Producing and detecting avatar misinformation and Human, Social, Cultural and Behavioral Modeling, Knowledge-based misdirection; Learning and Reasoning (2) Engineering semantically deeper "minds" for NPCs Peter Selfridge **Robert Schrag** consultant Global InfoTek, Inc. pselfridge@hotmail.com rschrag@globalinfotek.com **Virtual World research interest:** Automated social analysis; education; bots M. Layne Kalbfleisch **Eric Young Dynamic Animation Systems GMU** eyoung@d-a-s.com mkalbfle@gmu.edu Virtual World research interest: Virtual World research interest: **Artificial Intelligence Programming** How people's level of expertise (cognitive and emotional) influences how they make use of and/or conduct themselves in virtual environments. I study nonverbal reasoning and the ways in which the

environment influences this reasoning as a universal model

Kevin McCabe **Doyle Weishar GMU** i SW corp kmccabe@gmu.edu doyle@iswcorp.com Virtual World research interest: We currently have four islands in Second Life where we currently teach a course for undergraduates in the economics of the metaverse. We also do experimental economics research on these islands. **Gary Singer** Jeffrey Kim Harris **INSER, University of Washington** gsinger@harris.com jykim@u.washington.edu Virtual World research interest: Virtual World research interest: Information management/knowledge management, Storytelling, Social Discord, Distributed Decision Making, Knowledge content-based retrieval, service-oriented architecture **Sharing** (SOA), databases, and applications of computational models of cognitive processes. Seeking teaming with "soft science" researchers Liam Mayron Thomas Eskridge **Institute for Human and Machine Cognition Harris** teskridge@ihmc.us Imavron@harris.com Virtual World research interest: **Virtual World research interest:** Information management/knowledge management, Distributed, policy-based control and management of content-based retrieval, service-oriented architecture 1. contextually appropriate behavior of software agents in the virtual (SOA), databases, and applications of computational models world, of cognitive processes 2. coordination and cooperation of human-agent interactions, 3. interaction of agents with the virtual environment Reasoning Michael Seifert **Bill Rivers Integrated Training Solutions** Honeywell wrivers@itsnc.net michael.seifert@honeywell.com Virtual World research interest: Language and culture; analysis Mike Daily **Dustin Best HRL Laboratories** IRG mjdaily@hrl.com dbest@biometricgroup.com Virtual World research interest: **Virtual World research interest:** rapid collection, behavior analysis IBG offers products and services that empower clients to respond proactively to the offensive and defensive applications of Virtual Worlds. IBG is interested in collaborating with the Virtual Worlds community to provide our insight and improve our capabilities Son Dao Anil Varma **HRL Laboratories** Industrial Artificial Intelligence Lab, GE Global Research skdao@hrl.com varma@crd.ge.com Virtual World research interest: Virtual World research interest: Data Mining and Behavior Analysis in Virtual World Artificial Intelligence algorithms, predictive modeling, anomaly detection and optimization in large information environments.

**Brian Dennis** Kenneth Kaizer Lockheed Martin ATL / ISX Laboratory Lattice, Inc. bdennis@atl.lmco.com kkaizer@latticeincorporated.com **Virtual World research interest:** Virtual World research interest: Researching the intersection of Virtual Worlds and Web Persistent Virtual Environments based social media environments. The latter often provides Social and System Dynamics a complementary channel to observe participants in the **Entity Artificial Intelligence** former. Also interested in network based trust evaluation algorithms. Kenneth Kisiel Stephen LeFevre **Intelligent Software Solutions Inc. Lockheed Martin** steve.lefevre@issinc.com kenneth.w.kisiel@lmco.com **Virtual World research interest:** Virtual World research interest: Modeling and Simulation Working Through Synthetic Worlds Brian Mennecke Michelle Weihmann-Purcell **Iowa State University Lockheed Martin IS&GS** mennecke@bus.iastate.edu michelle.j.weihmann-purcell@lmco.com Virtual World research interest: **Virtual World research interest:** Embodiment, presence, Avatar characteristics, virtual avatar representation, ideology, degree of influence space, activity theory, communication patterns, latent communication, content analysis, linguistics, decision making, collaboration, MMOG, Second Life, Eve Online Henri Hodara **Christopher Rouff** L-3 PHOTONICS Lockheed Martin Advanced Technology Laboratories, ISX Lab henri.hodara@L-3com.com crouff@atl.lmco.com **Virtual World research interest:** Fusion of Data Mining with Social Sciences James Bechtel Ted Vera **L-3 PHOTONICS Northrop Grumman** James.Bechtel@L-3Com.com TED.VERA@ngc.com Virtual World research interest: Virtual World research interest: analysis and prediction Virtual World Development and Cultural Expertise **Andrew Hickl** Brian Masterson **Language Computer Corporation** Northrop Grumman/Xetron andy@languagecomputer.com brian.masterson@ngc.com Virtual World research interest: natural language processing, recognition of unnecessarily imprecise/deceptive language, virtual worlds situational awareness, dialog, alias detection, sentiment detection, recognition of normative / non-normative behaviors

Kari Kelton Nathan Carpenter NSI **Pyxis Engineering LLC** kkelton@natlsec.com nate.carpenter@pyxisengineering.com Virtual World research interest: Virtual World research interest: Realtime processing of large volumes of user interaction data into Virtual worlds as social science laboratories analysis-ready information Alex Postnikov Mark Conger **Northrop Grumman Aerospace Systems Rockwell Collins** apostnik@rockwellcollins.com mark.conger@ngc.com Virtual World research interest: **Virtual World research interest:** Broad range of research and applied applications of Serious **Experimental Command and Control** Games and Virtual Worlds. To date focus has been on Ad-hoc Multi-Modal Communications internal applications for training, education and Virtual Fleet Commander recruitment. As well as Department of Defense targeted Goal oriented structure detection applications such as warfighter mission Meta-gaming. Breaking rules of the game Thom McLean **Holly Handley Pacific Science & Engineering Group** Rockwell Collins, Inc. hollyhandley@pacific-science.com almclean@rockwellcollins.com Virtual World research interest: Virtual World research interest: Our interest is the cultural research into possible Blended reality, transference of in-game behaviors to real-world, differences in gaming behavior. augmented relationships, multi-modal communications and networking, emergent organization and leadership, computational models for large scale environments. Chris Poulin **Douglas Sackin Poulin Holdings. LLC** SAIC chris@poulinhugin.com DOUGLAS.M.SACKIN@saic.com **Virtual World research interest: Virtual World research interest:** AI, Agents, Linguistic analysis, and Scalability. Behavioral and cultural analysis for virtual worlds, MMOs, and social networking platforms **Paul Thompson** Carl Symborski Poulin Holdings, LLC / Dartmouth College **Science Applications International Corporation** paul.thompson@dartmouth.edu carl.w.symborski@saic.com **Virtual World research interest: Virtual World research interest:** Virtual communities that span multiple virtual worlds. Linguistic analysis Nick Yee Rafael Alonso **PARC SET** nicholas.yee@parc.com ralonso@setcorp.com Virtual World research interest: Virtual World research interest: MMO player motivations, fluidity of digitial selfabstract and mirror worlds, authoring behaviors representation, transformed social interaction, data-mining using server-side data, online surveys, experimental designs in immersive virtual reality

Jonathan Whetzel Sandia National Laboratories jhwhetz@sandia.gov Virtual World research interest: Using automated knowledge capture techniques for acquiring strategy information from collaborative groups working together on a task in this type of environment.	Sheldon Meth System Planning Corporation smeth@sysplan.com
Edward Dieterle  SRI International  edward.dieterle@sri.com	Sven Brueckner  TechTeam Government Solutions, Inc.  sven.brueckner@newvectors.net
William Mohr SRI International william.mohr@sri.com	Clifford Behrens Telcordia Technologies, Inc. cliff@research.telcordia.com Virtual World research interest: Cultural modeling and cultural emergence; cognition and learning in polycultural virtual worlds; participatory modeling in agent based environments; model verification and validation; social science epistemology
Michael Stickland Sandia National Laboratories mgstick@sandia.gov Virtual World research interest: Social dynamics, influence, information cascades, etc.	Dinesh Manocha University of North Carolina at Chapel Hill dm@cs.unc.edu Virtual World research interest: Crowd Simulation, Physics Simulation, Real-Time Interaction and Rendering, Social Networks, Online virtual worlds
Jacob Crossman Soar Technology jcrossman@soartech.com	Dmitri Williams  USC  dmitri.williams@usc.edu  Virtual World research interest:  Social psychology, teams and groups, methodology, large-scale data and metrics, experiments, surveys, economics, identity.
Byron Reeves Stanford University reeves@stanford.edu Virtual World research interest: Virtual economies; self representation via avatars; social networks	Jan-Michael Frahm  UNC Chapel Hill  jmf@cs.unc.edu  Virtual World research interest:  computer vision, 3D reconstruction of static and dynamic scenes
Dan Fu Stottler Henke fu@stottlerhenke.com Virtual World research interest: Machine learning, case-based reasoning, link discovery	Victor Lavrenko University of Edinburgh vlavrenk@inf.ed.ac.uk Virtual World research interest: Analyzing the content of chat messages. Detecting when a group of players are organizing an activity of interest. Inferring the roles of individuals in a group from text messages.

### Juliana Brixey

### **University of Kansas School of Nursing**

jbrixey@kumc.edu

### **Virtual World research interest:**

- 1. working as virtual teams distrubuted across time and distance;
- 2. creating simulations of real life in second life
- 3. tagging in second life and the resulting folksonomy

Jaideep Srivastava

# **University of Minnesota**

srivasta@cs.umn.edu

### Virtual World research interest:

Interested in all computing aspects, i.e. algorithms, scalability, machine learning, data management, user modeling, etc., of virtual worlds. Presently working on a multi-institutional, multi-disciplinary project with data from a very large scale, commerce

Dick Horst

UserWorks, Inc.

dhorst@userworks.com

### **Virtual World research interest:**

user experience design and measurement, interaction design, user performance measurement, behavioral data analysis, user requirements and needs, usability evaluation, accessibility evaluation, cognitive sciences, human factors engineering

Tom Leydorf

**Wave Technologies, Inc** 

tleydorf@wvtec.com

## **Virtual World research interest:**

The use of virtual worlds for recruitment, secret communication, and attack planning by insurgents, terrorists, and others.